

**REMARKS**

Reconsideration of the present application is respectfully requested.

**I. Status of Claims**

Claim 91 has been amended to separate out certain embodiments recited in the claim. Support for these amendments is in the original claim as filed. Claim 91 has been further amended to recite a Markush group, and to account for discrepancies as discussed in detail below. Claim 117 has been amended to depend from claim 124. Support for this amendment can be found in the original claims as filed. New claims 172-176 have been added to reflect the preferred amino acid embodiments of claim 91. Support for these new claims is found in original claim 91 as filed. Claims 1, 17-19, 23-26, 50-52, 56-59, 82-84, 88-91, 117-119, 123-126, 163-165, and 169-171 are withdrawn as nonelected species. Claims 2-16, 20-22, 27-49, 53-55, 60-81, 85-87, 92-116, 120-122, 127-162, and 166-168 were previously canceled. Therefore, claims 1, 17-19, 23-26, 50-52, 56-59, 82-84, 88-91, 117-119, 123-126, 163-165, 169-171, and 172-176 are currently pending. No new matter is added by way of this amendment.

**II. Priority**

The Examiner has objected to the foreign priority claim to German priority document 101 44 340.4, dated September 10, 2001. According to the Examiner, claims 91, 117, 118, and 124, which were elected in response to the restriction requirement, are not disclosed in this document. Thus, according to the Examiner, the instant application cannot claim the priority of the German application.

In response, applicants respectfully submit that the present application claims priority to five German priority documents, certified copies of which were submitted to the U.S.P.T.O. on November 22, 2004. Specifically, the present claims correspond to specific claims of German priority document DE 101 56 995 as follows:

| Present Claims | DE 101 56 995 |
|----------------|---------------|
| 91             | Claim 1       |
| 117            | Claim 27      |
| 118            | Claim 28      |
| 124            | Claim 34      |

The present claims 91, 117, 118, and 124 are fully supported in disclosure of the priority documents. Accordingly, withdrawal of this objection is believed to be in order.

### III. Abstract

The Examiner has objected to the abstract on formal grounds. Specifically, the Examiner requests deletion of the second reference to formula "(I)" in order to avoid confusion. In response, Applicants have amended the abstract accordingly.

### IV. Duplicate Claims

The Examiner has indicated that if claim 117 is found allowable, claim 124 will be objected to as a duplicate claim. In response, Applicants submit that claim 117 differs from claim 124 in that claim 117 is a medication, which has in addition to the compound of claim 91, carriers, auxiliaries, additives, or combinations thereof, whereas claim 124 is a pharmaceutical composition containing the compound of claim 91 with a carrier, and is thus a narrower claim. Nonetheless, in order to advance prosecution of the present application, Applicants hereby amend claim 117 to depend from claim 124 as a medication comprising the pharmaceutical composition of claim 124. Support for this amendment is in the original claims as filed.

### V. 35 U.S.C. § 112, second paragraph

The Examiner has rejected Claim 91 as indefinite under 35 U.S.C. 112, ¶2. Claims 117, 118, and 124 have also been rejected as indefinite under 35 U.S.C. 112, ¶2, as they depend from claim 91. Specifically, the Examiner rejects the claim language as it provides both broad and narrow definitions for D- or L- amino acids. For example, claim 91 reads broadly that (NH-X<sup>1</sup>-C=O) is a D- or L- amino acid, and then proceeds to narrowly define preferable amino acids.

In response, applicants have amended claim 91 to separate out certain embodiments in new dependent claims. New claims 172-176 have been added to cover such substituents. Support for these amendments is found in original claim 91 as filed. Withdrawal of this rejection is believed to be in order.

## VI. 35 U.S.C. § 102(b)

The Examiner has rejected claims 91, 117, 118, and 124 as anticipated by U.S. Patent No. 6,197,541 (to Coughlin). Specifically, the Examiner contends that the claims are open to other amino acids than those listed in the claim. According to the Examiner, Coughlin teaches limitations which fall within the parameters of the claim. Specifically, the Examiner asserts that Formula 4 of Coughlin (shown below and defined at col. 11, line 52 - col. 12 line 12) teaches the compounds of claim 91.

Applicants respectfully traverse the rejection and respectfully request reconsideration. According to Coughlin, Groups B and Z can represent any amino acid (Coughlin, col. 12, lines 9-11) or “noninterfering organic radicals” (Coughlin, col. 11, line 63). Additionally, Coughlin teaches at col. 6, line 24, “[i]n the specific peptides shown in the present application, the L-form of any amino acid having an optical isomer is intended unless the D-form is expressly indicated by a dagger superscript (<sup>†</sup>)”. Overlap of the amino acid constituents between claim 91 and Coughlin can be represented in the following two ways:

|             |                  |                  |                  |                  |                  |                  |                  |
|-------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Coughlin:   | B                | AA <sub>9</sub>  | AA <sub>10</sub> | AA <sub>11</sub> | AA <sub>12</sub> | AA <sub>13</sub> | Z                |
| Claim 91:   | AA**             | AA <sub>X1</sub> | AA <sub>X2</sub> | AA <sub>X3</sub> | AA <sub>X4</sub> | AA <sub>X5</sub> | AA <sub>X6</sub> |
| <b>-OR-</b> |                  |                  |                  |                  |                  |                  |                  |
| Coughlin:   | B                | AA <sub>9</sub>  | AA <sub>10</sub> | AA <sub>11</sub> | AA <sub>12</sub> | AA <sub>13</sub> | Z                |
| Claim 91:   | AA <sub>X1</sub> | AA <sub>X2</sub> | AA <sub>X3</sub> | AA <sub>X4</sub> | AA <sub>X5</sub> | AA <sub>X6</sub> | AA**             |

AA\*\* is taught by Coughlin to be a noninterfering organic radical.

Claim 91, as amended, limits AA<sub>X3</sub> to the preferred amino acids: L-Cha, D-Cha, L-Chg, and D-Chg. As shown above, AA<sub>X3</sub> can only overlap with Coughlin amino acids AA<sub>10</sub> or AA<sub>11</sub>. Coughlin fails to teach these specific substituted at AA<sub>10</sub> or AA<sub>11</sub>. Rather, Coughlin teaches that AA<sub>10</sub> is an acidic amino acid defined as “containing a total of 4 carbon atoms or less” (col. 7:1-3), specifically Asp or Glu. Coughlin also teaches that AA<sub>11</sub> is proline or a small amino acid, specifically Gly, Ala, Ser, Cys, Sar, beta-Ala, or Aib. Therefore, claim 91, as amended, is not anticipated by Coughlin because the identity of AA<sub>X3</sub> contains nonpolar, uncharged amino acids with at least six carbons. Accordingly, withdrawal of the rejection is respectfully requested.

Applicants have further amended claim 91 to incorporate generic claim language for AA(X<sub>4</sub>) and AA(X<sub>5</sub>) (i.e., removal of "small" amino acid and an "aromatic" amino acid, respectively). Support for this amendment is found in claim 91 as well as in the amino acids represented in a number of the examples (e.g., Examples 1, 3, 4 and 5). Regarding AA(X<sub>4</sub>), when the C-terminus is shortened by 1 amino acid (as defined in claim 91), Example 1, 3, and 5 disclose a compound of claim 91, wherein AA(X<sub>4</sub>) is not limited to a small amino acid (e.g., Cha, Tyr). Regarding AA(X<sub>5</sub>), when the c-terminus is shortened by 1 amino acid (as defined in claim 91), Examples 1, 3, 4, and 5 disclose a compound of claim 91 wherein AA(X) is not limited to an aromatic amino acid (e.g., Orn, Arg, Glu).

Therefore, in view of the above amendments and remarks, the subsisting claims are believed to in condition for allowance and such action is earnestly solicited.

If there are any other issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

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Respectfully submitted,

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